

VC-PTZ12 (DANTE)

4K Ultra HD Video Conference Camera AI tracking



PRODUCT OVERVIEW

The **Resoundify VC-PTZ12 (DANTE)** 4K UHD PTZ camera delivers exceptional image quality and intelligent performance, making it ideal for broadcasting, live events, education, and conferencing environments. Equipped with a 1/2.8-inch UHD CMOS sensor offering up to 8.51 megapixels, it supports stunning 4K@60fps ultra-high-definition video, while remaining compatible with 1080p, 720p, and other resolutions. Its 12x optical zoom lens provides a wide 80° field of view, ensuring crisp and detailed visuals for both close-up and wide-angle shots. The camera's superior low-light performance, powered by a 3D noise reduction algorithm, maintains clean and clear images even in dim environments, achieving an impressive signal-to-noise ratio of 55dB. Supporting HDMI 2.0 and 3G-SDI interfaces, the camera can output uncompressed 4K digital video with effective transmission distances of up to 150 meters at 1080p30. With HDMI, 3G-SDI, USB 3.0, and LAN ports, it allows up to four simultaneous HD digital outputs, providing flexibility for diverse system setups. The integrated AI tracking function, driven by embedded NPU hardware and deep learning technology, enables precise and smooth face tracking, making it ideal for automatic presenter or speaker tracking in classrooms, lectures, and live presentations.

KEY FEATURES

- **Compatible with NDI®|HX2 Protocol** : NDI is ideal for broadcasting including broadcast studios, live broadcast, gymnasiums, arenas, churches and lecture halls, thanks to its high SNR and ultra-low latency.
- **4K@60fps UHD Video** : 1/2.8-inch UHD CMOS sensor with up to 8.51 megapixels offers 4K (3840x2160) UHD images, downward compatible with 1080P, 720P and other resolutions.
- **AI Tracking** : Embedded NPU hardware uses the deep learning technology to extract the target's characteristics and allow smooth face tracking, no matter where the face is facing. The product is applicable to automatic tracking of speakers in lecture and presentation.
- **12x Optical Zoom** : 4K UHD lens with effective resolution of 8 megapixels, 12x optical zoom and FOV angle of up to 80°.
- **Multiple Interfaces**: It supports HDMI 2.0 HD output, and also equipped with 3G-SDI interface, the effective transmission distance up to 150 meters (1080P30). HDMI, 3G-SDI, USB 3.0, LAN can simultaneously output 4 channels of high-definition digital signals.
- **Built-in Gravity Sensor** : Automatic image rotation supported for easy installation.
- **Smart Exposure** : The effects of projectors, TV and other devices on the people can be resolved effectively.
- **Remote Control**: Through the LAN, RS232 and RS485 serial ports, the camera can be controlled remotely.

APPLICATIONS

- Boardrooms
- Classrooms
- Auditorium

RESOUNDIFY

TECHNICAL SPECIFICATIONS

Camera Specifications

Video Resolution	4K/60, 4K/50, 4K/30, 4K/25, 4K/59.94, 4K/29.97; 1080P/60, 1080P/50, 1080I/60, 1080I/50, 1080P/30, 1080P/59.94, 1080I/59.94, 1080P/29.97; 720P/60, 720P/59.94
Sensor	1/2.8 inches, CMOS, Effective Pixels: 8.40 Megapixels
Scanning Mode	Progressive
Lens	12x, f = 4.4mm ~ 52.8mm, F1.8 ~ F2.6
Digital Zoom	16x
Minimum Illumination	0.5Lux @ (F1.8, AGC ON)
Shutter Speed	1/30s ~ 1/10000s
White Balance	Auto, Indoor, Outdoor, One Push, Manual, VAR
Backlight Compensation	Support
Digital Noise Reduction	3D Digital Noise Reduction
SNR	≥55dB
Horizontal FOV	80.8° ~ 7.5°
Vertical FOV	49.9° ~ 4.3°
Pan Angle	±170°
Tilt Angle	-30° ~ +90°
Pan Speed	1.7° ~ 100°/s
Tilt Speed	1.7° ~ 69.9°/s
Image Flip	Support
Image Freeze	Support
PoE	Support
Preset Position	255
Preset Accuracy	0.1°

Interfaces Specifications

HD Output	1 × HDMI: Version 2.0 1 × 3G-SDI: BNC, 800mVp-p, 75Ω, as per SMPTE 424M standard
Network Interface	1 × RJ45: 10M/100M/1000M adaptive Ethernet
Audio Interface	1 × LINE IN: 3.5mm Jack
USB Interface	1x USB3.0, type-C type
Control Interface	1 × RS485: 2pin phoenix port, Max Distance: 1200m, Protocol: VISCA / Pelco-D / Pelco-P 1 × RS232 IN: 8pin Mini DIN, Max Distance: 30m, Protocol: VISCA / Pelco-D / Pelco-P 1 × RS232 OUT: 8pin Mini DIN, Max Distance: 30m, Protocol: VISCA only
Power Interface	JEITA type (DC IN 12V)

TECHNICAL SPECIFICATIONS

Network Specifications

Video Compression	H.265 / H.264 / MJPEG
Video Stream	First Stream, Second Stream
First Stream Resolution	3840×2160, 1920×1080, 1280×720, 1024×576 etc
Second Stream Resolution	720x576, 720x480, 320x240 etc.
Video Bit Rate	32kbps–51200kbps
Bit Rate Control	VBR, CBR
Frame Rate	50Hz: 1fps–50fps, 60Hz: 1fps–60fps
Audio Compression	AAC, G711A
Audio Bit Rate	96kbps, 128kbps, 256Kbps
Protocols	NDI HX2, TCP/IP, HTTP, RTSP, RTMP(s), Onvif, DHCP, Multicast, etc
Control Protocol	NDI® PTZ, VISCA Over IP

USB Specifications

Operating System Supported	Windows 7, Windows 8, windows 10, windows 11, MacOS 11.6.6 or higher versions, Ubuntu 18.04.4 lts or higher versions, Android 8.0.0 or higher versions
Color System / Compression	YUY2 H.265 / H.264 / MJPEG
Video Format	YUY2 :Max.1080P5; H.264 : Max.2160P30; H.265 HEVC: Max.2160P30; MJPEG: Max.2160P30
USB Audio	Support
USB Video Communication Protocol	UVC 1.1~1.5
UVC PTZ Control	Support

General Specifications

Input Voltage	DC 12V / PoE+ (802.3at)
Input Current	1.5A (Max.)
Power Switch	Support
Recovery key	Support
IR Remote Input	Support
Operating Temperature	-10°C – 40°C
Storage Temperature	-40°C – 60°C
Power Consumption	12W (Max.)
Dimension	223mm × 155mm × 166mm
Net Weight	1.8kg